

PUBLIC HEALTH AND MEDICAL ALL HAZARDS PLAN SUMMARY

Introduction

Since September 11, 2001, North Dakota public health and medical communities have been preparing for large-scale emergencies and disasters from both intentional hazards and unintentional hazards, such as communicable disease outbreaks. This all-hazards approach has resulted in high levels of preparedness for a wide range of threats.

The North Dakota Department of Health (NDDoH) has received federal funds for the enhancement of public health and medical emergency preparedness. As a result, the NDDoH created the Emergency Preparedness and Response Section that is responsible for building a coordinated health and medical capacity within the various divisions of the NDDoH, as well as with local public health, laboratories, hospitals, clinics and emergency medical services (EMS) providers.

This planning and resource building has involved a wide variety of stakeholders at local, state and federal levels. The strategy has been to develop public health and medical plans and processes that coordinate under the North Dakota State Emergency Operations Plans (SEOP) administered by the Division of Emergency Services (DES). The NDDoH is the functional coordinator for the health and medical portion of the SEOP and has worked closely with DES to ensure that public health and medical response is closely integrated into the overall North Dakota emergency response plan.

Planning and Preparation

The NDDoH has coordinated the development of three primary public health and medical preparedness plans at the state level that would be used in response to a pandemic influenza outbreak. Those plans include a state public health plan, a strategic national stockpile plan and a hospital and EMS surge-capacity plan. The hospital surge capacity plan was created under contract with the North Dakota Healthcare Association, and EMS surge capacity planning is occurring under contract with the North Dakota EMS Association. Additionally, the NDDoH has contracted with local public health units to develop regional and local public health plans.

The following is a description of the major components of the state public health, strategic national stockpile and hospital surge capacity plans:

Direction and Control

The NDDoH has established an incident command system for use in the NDDoH emergency operations center. The incident command system consists of five stations: incident command, planning, operations, logistics and finance administration.

- The incident command station establishes command, controls resources and maintains
 accountability. Three additional sub-stations exist as part of the Incident Command
 station: safety (anticipates, detects and corrects unsafe situations), liaison (establishes
 contacts with other assisting agencies) and public information (develops a consistent
 message, liaison to media).
- The planning station prepares incident action plans.
- The operations station directs tactical operations.
- The logistics station is responsible for acquisition of resources.
- The fiscal station maintains financial records and monitors costs.

The NDDoH emergency operations center has the capacity to be activated and functional 24 hours a day, seven days a week. An alternative department operations center has been configured and can be made operational if the primary department operations center is incapacitated.

When the Division of Emergency Services activates the state emergency operations center (SEOC), the NDDoH establishes representation to the SEOC and activates the NDDoH emergency operations center. Incident objectives are created at the SEOC and implemented at the NDDoH emergency operations center.

Communications

Public health and medical communications are carried out through the Health Alert Network (HAN). Two separate but compatible wide-area networks are utilized to communicate with public health units and hospitals. The wide-area networks provide communication through the exchange of data, video conferencing and limited voice applications. The wide-area networks are secure, redundant and do not rely on normal public communication systems such as telephones and Internet. All local public health units, hospitals, the NDDoH, the North Dakota Healthcare Association and the University of North Dakota School of Medicine are part of the HAN system. The network has the capacity to connect with any of the other sites located on the North Dakota Stagenet system (i.e., local government, K-12 education, higher education, and state government).

In addition to the wide-area networks, the HAN also distributes messages through email, faxes, video streaming on the Internet and telephone. The HAN soon will complete installation of an automated public health and medical personnel alerting system. This system allows personnel to enter contact information (i.e., work phone, cell phone, home phone, pager) into a website profile. The automated system distributes email and fax messages, in addition to calling telephones and pagers.

Regional and Local Planning

Eight local public health unit regions have been established for emergency preparedness and response. Each of the regions has an emergency preparedness and response coordinator.

Regional and local public health plans describe local direction and control systems, identify the operational detail and locations of emergency vaccination clinics, and indicate how large numbers of deceased will be handled. Local public health units have planned for the staffing and

operation of emergency vaccination clinics that would be opened if sufficient quantities of vaccine are available to warrant their use. Local public health units also have the authority to issue quarantine and isolation orders. Their plans include provisions for the care of quarantined and isolated patients.

Disease Control

Epidemiologists have been assigned to each of the states eight public health regions. A syndromic surveillance program has been created which provides monitoring of unusual disease patterns. An electronic disease reporting system has been implemented.

Distribution of Pharmaceuticals

It is anticipated that the federal government would be the only source of vaccine developed in response to a pandemic influenza outbreak. The North Dakota public health system has developed a plan for the distribution of large-scale pharmaceuticals and vaccines in a short period of time. If sufficient quantities of vaccine exist, the emergency vaccination system would be deployed. The system consists of a receiving process from the federal government and distribution by the NDDoH to local public health emergency clinics called points of dispensing (PODs). Local public health units have planned for 75 PODs statewide. If insufficient vaccine exists to warrant opening PODs, local public health units will establish the location of alternative clinic sites.

Vendor-Managed Inventories of Pharmaceuticals and Medical Supplies

The NDDoH has arranged for the stockpiling of certain pharmaceuticals, such as antibiotics, and medical supplies, such as infection-control masks, for emergency use through a process known as vendor-managed inventory. The NDDoH has contracted with a vendor to maintain a predetermined quantity of pharmaceuticals for use by the state. The vendor holds the quantity in an undisclosed location for a period of time before releasing the drugs into the normal supply chain. The released drugs are then replaced with new drugs. This process allows drugs to be maintained in a state-controlled stockpile without having to incur the cost of wasting drugs due to expiration. The NDDoH is in the process of contracting with another vendor for additional medical supplies, such as cots and stethoscopes.

Pre-positioning of Certain Medical Equipment

The NDDoH provided funding to the North Dakota Healthcare Association for the purchase and placement of hospital equipment that would be useful during an influenza pandemic. The equipment includes patient ventilators that assist breathing and portable hepa filtration machines that allow a negative pressure room to be established for better infection control. Identical equipment was purchased for all hospitals to ensure that the equipment is interchangeable among hospitals and can be shifted when necessary.

Isolation and Quarantine

Local public health officers and the state health officer have the authority to quarantine and isolate people. If the quarantine or isolation is for a period exceeding 10 days, the health officer must obtain a court order to continue the segregation. Failure to comply with a quarantine or isolation order is a class B misdemeanor.

Public Information Communication Plan

A statewide public information communication plan was established. The plan provides for the identification and training of public health spokespersons, the development of websites and other information distribution methods, the creation of consistent messages and the translation of health fact sheets into seven foreign languages for North Dakota residents who do not speak or

read English. A public health information hotline has been created that allows the public to call for information about public health emergencies. In addition, each of the eight regions has a public health public information officer who coordinates with the NDDoH Office of Public Information.

During an influenza pandemic, public messaging would occur describing the best ways to avoid becoming ill, the status of vaccine supply, the location of emergency vaccination clinics, information about how to care for people who are ill, as well as other relevant information.

Laboratory

Laboratory capacity has been increased. New testing procedures have been added for both biologic and chemical specimens. Analytic equipment has been added and laboratory personnel have been trained. A laboratory response network has been established involving multiple private laboratories throughout the state and the NDDoH Public Health laboratory. Backup laboratory and surge laboratory capacities have been created.

Hospital Surge Capacity

The NDDoH has been planning with the North Dakota hospital community for the creation of hospital surge capacity. Our goal has been to create surge capacity for at least 500 patients over and above normal hospitalization census. The planning process has been implemented through a contract with the North Dakota Healthcare Association. Four hospital regions have been defined in the state. Hospital representatives have identified areas to strengthen and prioritize needs.

The regional plans are designed to facilitate the coordination and communication among hospitals, public health, emergency management and other entities involved in emergency preparedness activities. The plans provide guidance and procedures that will be used to deploy additional patient beds should a disaster occur in North Dakota.

The plans identify the process used to activate public health and medical response. The plans consider the critical issues of hospital bed capacity, overcrowding and diversion at medical facilities, flow of patients, transfer of equipment as needed, supply and re-supply of pharmaceuticals, hospital security and medical waste disposal. The plans identify that much of the need for additional hospital beds can be met by utilizing empty beds (based on average daily census figures) and by increasing bed strength of hospitals through use of overflow patient care areas, discharge of elective patients, and similar procedures. The plans also identify potential alternative care facilities that could be used as hospitals if the need arises.

Public Health and Medical Volunteers

During an influenza pandemic, it will be necessary to rely on public health and medical volunteers for some of the health-care delivery. Two main strategies have been implemented to meet this need:

- The NDDoH has contracted with lead regional local public health units for the recruitment of public health and medical volunteers. They have successfully recruited more than 2,000 volunteers.
- Additionally, the NDDoH has contracted with various health and medical licensure boards (i.e., Board of Nursing, Board of Medical Examiners) to provide contact information of licensed health-care professionals in the state. This information is transferred from the licensure board's information system into the Health Alert Network messaging system for automated alerting. Using this process, the NDDoH can quickly recruit health and medical personnel when they are needed during an influenza pandemic.

EMS Surge Capacity

The NDDoH contracted with the North Dakota Emergency Medical Services Association to conduct an EMS needs assessment and to develop EMS surge and transportation plans. EMS plans include personnel training, development of mutual aid agreements, identification of alternative transportation methods (i.e., school buses), creation of regional equipment caches and development of regional response teams.

For more information about the North Dakota Public Health and Medical All Hazards Plan, contact the North Dakota Department of Health's Emergency Preparedness and Response Section at 701.328.2270.